

Jan Plutnar

List of Publications by Year in descending order

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papers

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304743

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times ranked

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#	ARTICLE	IF	CITATIONS
1	A Triazacyclononane-Based Bifunctional Phosphinate Ligand for the Preparation of Multimeric ⁶⁸ Ga Tracers for Positron Emission Tomography. <i>Chemistry - A European Journal</i> , 2010, 16, 7174-7185.	3.3	138
2	Complexation of Metal Ions with TRAP (1,4,7-Triazacyclononane Phosphinic Acid) Ligands and 1,4,7-Triazacyclononane-1,4,7-triacetic Acid: Phosphinate-Containing Ligands as Unique Chelators for Trivalent Gallium. <i>Inorganic Chemistry</i> , 2012, 51, 577-590.	4.0	96
3	The chemistry of CVD graphene. <i>Journal of Materials Chemistry C</i> , 2018, 6, 6082-6101.	5.5	95
4	Preserving Fine Structure Details and Dramatically Enhancing Electron Transfer Rates in Graphene 3D-Printed Electrodes via Thermal Annealing: Toward Nitroaromatic Explosives Sensing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35371-35375.	8.0	82
5	Products of Degradation of Black Phosphorus in Protic Solvents. <i>ACS Nano</i> , 2018, 12, 8390-8396.	14.6	70
6	Inherent impurities in 3D-printed electrodes are responsible for catalysis towards water splitting. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1120-1126.	10.3	57
7	Thermodynamic and Kinetic Study of Scandium(III) Complexes of DTPA and DOTA: A Step Toward Scandium Radiopharmaceuticals. <i>Chemistry - A European Journal</i> , 2014, 20, 7944-7955.	3.3	55
8	A Maze in Plastic Wastes: Autonomous Motile Photocatalytic Microrobots against Microplastics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 25102-25110.	8.0	53
9	Swarming of Perovskite-Like Bi ₂ WO ₆ Microrobots Destroy Textile Fibers under Visible Light. <i>Advanced Functional Materials</i> , 2020, 30, 2007073.	14.9	48
10	Chemically programmable microrobots weaving a web from hormones. <i>Nature Machine Intelligence</i> , 2020, 2, 711-718.	16.0	46
11	Multifunctional Visible-Light Powered Micromotors Based on Semiconducting Sulfur- and Nitrogen-Containing Donor-Acceptor Polymer. <i>Advanced Functional Materials</i> , 2020, 30, 2002701.	14.9	42
12	Chemical Microrobots as Self-Propelled Microbrushes against Dental Biofilm. <i>Cell Reports Physical Science</i> , 2020, 1, 100181.	5.6	40
13	Plasmonic Self-Propelled Nanomotors for Explosives Detection via Solution-Based Surface Enhanced Raman Scattering. <i>Advanced Functional Materials</i> , 2019, 29, 1903041.	14.9	35
14	Fluorination of Black Phosphorus: Will Black Phosphorus Burn Down in the Elemental Fluorine?. <i>Advanced Functional Materials</i> , 2018, 28, 1801438.	14.9	34
15	Fluorographene Modified by Grignard Reagents: A Broad Range of Functional Nanomaterials. <i>Chemistry - A European Journal</i> , 2017, 23, 1956-1964.	3.3	30
16	Novel polymeric metal complexes of calix[4]arene-11,23-diphosphonic acid: synthesis and structure determination. <i>Inorganica Chimica Acta</i> , 2002, 335, 27-35.	2.4	29
17	Thermodynamic, kinetic and solid-state study of divalent metal complexes of 1,4,8,11-tetraazacyclotetradecane (cyclam) bearing two trans (1,8-)methylphosphonic acid pendant arms. <i>Dalton Transactions</i> , 2006, , 5184-5197.	3.3	29
18	Metal Complexes of 4,11-Dimethyl-1,4,8,11-tetraazacyclotetradecane-1,8-bis(methylphosphonic acid) - Thermodynamic and Formation/Decomplexation Kinetic Studies. <i>European Journal of Inorganic Chemistry</i> , 2009, 2009, 3577-3592.	2.0	29

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19	Bone-seeking TRAP conjugates: surprising observations and their implications on the development of gallium-68-labeled bisphosphonates. <i>EJNMMI Research</i> , 2012, 2, 13.	2.5	29
20	Atomic Layer Deposition as a General Method Turns any 3D-Printed Electrode into a Desired Catalyst: Case Study in Photoelectrochemistry. <i>Advanced Energy Materials</i> , 2019, 9, 1900994.	19.5	28
21	Chemotactic Micro- and Nanodevices. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2190-2196.	13.8	25
22	Two-Dimensional Functionalized Germananes as Photoelectrocatalysts. <i>ACS Nano</i> , 2021, 15, 11681-11693.	14.6	25
23	Metal Complexes with Very Large Dipole Moments: the Anionic Carborane Nitriles $12\text{-NC}^{\ominus}\text{CB}_{11}\text{X}_{11}^{\ominus}$ ($X = \text{Tj}, \text{EtO}, \text{Og}$) $1.0, 0.78, 4.3, 14$ <small>rgB</small>	4.0	22
24	Six-Degree-of-Freedom Steerable Visible-Light-Driven Microsubmarines Using Water as a Fuel: Application for Explosives Decontamination. <i>Small</i> , 2021, 17, e2100294.	10.0	22
25	Unsymmetrically substituted side-bridged cyclam derivatives and their $\text{Cu}(\text{II})$ and $\text{Zn}(\text{II})$ complexes. <i>New Journal of Chemistry</i> , 2008, 32, 496-504.	2.8	20
26	Ternary Complexes of Zinc(II), Cyclen and Pyridinecarboxylic Acids. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 3974-3987.	2.0	19
27	Exfoliation of Calcium Germanide by Alkyl Halides. <i>Chemistry of Materials</i> , 2019, 31, 10126-10134.	6.7	18
28	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16517-16522.	13.8	14
29	Bismuthene Metallurgy: Transformation of Bismuth Particles to Ultrahigh Aspect Ratio 2D Microsheets. <i>Small</i> , 2020, 16, e2002037.	10.0	14
30	Near-Atomic-Thick Bismuthene Oxide Microsheets for Flexible Aqueous Anodes: Boosted Performance upon 3D to 2D Transition. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 55936-55944.	8.0	13
31	Fluorographene and Graphane as an Excellent Platform for Enzyme Biocatalysis. <i>Chemistry - A European Journal</i> , 2018, 24, 16833-16839.	3.3	8
32	Fluorine saturation on thermally reduced graphene. <i>Applied Materials Today</i> , 2019, 15, 343-349.	4.3	8
33	Cross-Bridged Cyclam with Phosphonate and Phosphinate Pendant Arms: Chelators for Copper Radioisotopes with Fast Complexation. <i>Inorganic Chemistry</i> , 2020, 59, 8432-8443.	4.0	8
34	Chemotaktische Mikro- und Nanomaschinen. <i>Angewandte Chemie</i> , 2019, 131, 2212-2218.	2.0	7
35	Fluorographenes for Energy and Sensing Application: The Amount of Fluorine Matters. <i>ACS Omega</i> , 2018, 3, 17700-17706.	3.5	6
36	Mechanical vs Electronic Strain: Oval-Shaped Alkynyl-Pt(II)-Phosphine Macrocycles. <i>Organometallics</i> , 2019, 38, 4633-4644.	2.3	6

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37	Fluorinated Transition Metal Carbides for Flexible Supercapacitors. ACS Applied Energy Materials, 2022, 5, 6353-6362.	5.1	6
38	A New Tris(phosphonomethyl) Monoacetic Acid Cyclam Derivative: Synthesis, Acid-Base and Metal Complexation Studies. European Journal of Inorganic Chemistry, 2011, 2011, 527-538.	2.0	5
39	Electron Transfer Mechanism of Substituted Benzimidazoles: Dimer Switching, Oscillations, and Search for Singlet Fission Properties. Journal of Physical Chemistry C, 2017, 121, 9963-9969.	3.1	5
40	Layered black phosphorus as a reducing agent " decoration with group 10 elements. RSC Advances, 2020, 10, 36452-36458.	3.6	5
41	Selenium covalently modified graphene: towards gas sensing. 2D Materials, 2019, 6, 034006.	4.4	4
42	Mechanism of Surface Alkylation of a Gold Aerogel with Tetra-n-butylstannane-d36: Identification of Byproducts. Journal of Physical Chemistry Letters, 2017, 8, 2339-2343.	4.6	3
43	Alkali Metal Arenides as a Universal Synthetic Tool for Layered 2D Germanene Modification. Angewandte Chemie, 2019, 131, 16669-16674.	2.0	0
44	Bismuthene Microsheets: Bismuthene Metallurgy: Transformation of Bismuth Particles to Ultrahigh Aspect Ratio 2D Microsheets (Small 29/2020). Small, 2020, 16, 2070163.	10.0	0
45	Oxidation of the B12 and CB11 Icosahedral Anions. , 2018, , 137-158.		0